Potential effects of vitamin K supplementation on bone metabolism

Stellingen behorende bij het proefschrift

Potential Effects of Vitamin K Supplementation on Bone Metabolism

van Alexandra M. Craciun

1. In the rat animal model maximal prothrombin synthesis may be achieved at vitamin K intakes at which urinary Gla excretion is sub-maximal. *(This thesis)*

2. PIVKA II, urinary Gla, and the hydroxyapatite-binding capacity of osteocalcin (HBC) are all markers for vitamin K status. If they are compared in subclinical deficiencies, HBC is the most sensitive marker for vitamin K status. *(This thesis)*

3. In healthy growing children the serum osteocalcin concentration is higher than in adults due to the high bone turnover in a growing organism. Still higher values may be associated with hypocalcemia or secondary hyperthyroidism. *(This thesis)*

4. The effect of vitamin K supplementation on bone metabolism is reflected by an increased HBC of osteocalcin and an increased serum concentration of bone-specific alklaine phosphatase, suggesting a positive effect on bone formation. *(This thesis)*

5. The deficiency of vitamin K at other tissues than liver is common among apparently healthy population. This observation should lead to a re-evaluation of the RDA for vitamin K based on the proportion between the carboxylated and the undercarboxylated forms of osteocalcin. *(This thesis)*

6. Bone density predicts death. An eight-year study revealed a strong relationship between bone density and mortality related to cardiovascular disease. *(Kado DM et. al. Arch Intern Med 159: 1215-20,1999)*

7. Europe is a Balkanic invention: Socrates, Plato, Aristotle were from the Balkans. *(Al. Paleologu)*

8. Promoveren bij een half-time aanstelling vol onderwijstaken is als de 100 meter lopen op één been.

9. Today is the first day of the rest of your life. *(Ch. Dederich)*

10. Some biochemists use statistics as a drunken man uses lampposts – for support rather than illumination.

11. The noblest of all dogs is the hot-dog; it feeds the hand that bites it. *(Laurence J. Peter)*

Maastricht, 16 Maart 2001